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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,875	10/21/2003	Moon-Kuen Kim	100528.0005US1	6826

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EXAMINER

COOLMAN, VAUGHN

ART UNIT PAPER NUMBER

3618

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,875

Applicant(s)

KIM, MOON-KUEN

Examiner

Vaughn T. Coolman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4, 6-14 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB08)
Paper No(s)/Mail Date <u>07/28/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 133, 119a, and 129a. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “200” has been used to designate both the door (page 19, line 1, figures 10 and 11) and the side step (page 2, line 8, figure 12).

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The drawings have been examined to only show one end of the operating member rotatably connected to the rotating link and the other end connected to the foothold. Therefore, the “operating member having one end being rotatably connected to one end of said rotating link and the other end being connected to one of said guide bar and said foothold” must be shown or the feature canceled from the claims (claim numbers 9, 13, and 14). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The abstract of the disclosure is objected to because of the inclusion of the word "means" in lines 2, 4, 5(2 instances), 6 and the word "said" in line 5. Correction is required. See MPEP § 608.01(b).

In addition, the phrase "in forward and out backward" in line 4 is unclear and possibly contradictory. The claims and specification have been examined to show the fixing means to be a front frame and a rear frame, defining the "forward" direction as "out". It is suggested to remove either the terms "in" and "out", or the terms "forward" and "backward" from the abstract. Also, the examiner suggests the removal of the phrase "of the present" in line 7.

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The disclosure is objected to because of the following informalities: because it is replete with grammatical and idiomatic errors. Some examples of unclear language are: “moved in forward and backward”(page 1, line 7 and page 3, line 2), “respectively”(page 3, line 21) is used contrary to the claims and drawings, and the phrase “being blocked to at one end be moved”(page 4, line 24).

Appropriate correction is required.

Claim Objections

Claims 1, 9, and 14 are objected to because of the following informalities: the phrase “movably in forward and out backward” is unclear for the reason disclosed previously.

Appropriate correction is required.

Claim 2 is objected to because of the following informalities: the term “respectively” is unclear for the reason disclosed in the objection to the disclosure of the claimed invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 9 recites the limitation "said door" in lines 4-5 of page 24. There is insufficient antecedent basis for this limitation in the claim. It is suggested to replace the term "said door" with the term "a door of said vehicle".

Claim 14 recites the limitation "said connecting frame" in line 5 of page 26. There is insufficient antecedent basis for this limitation in the claim. It is suggested to replace the term "connecting frame" with the term "connecting member", which is positively recited in line 13 of page 25. For the purpose of examination, "connecting frame" is considered as the element designated by reference character 130 in Figures 1, 10, and 11.

Claim 14 recites the limitation "said rotating link" in lines 10 and 15 of page 26. There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, "said rotating link" is considered as the element designated by reference character 160 in Figures 1, 10, and 11.

Claim 14 recites the limitation "said door" in lines 17-18 of page 26. There is insufficient antecedent basis for this limitation in the claim. It is suggested to replace the term "said door" with the term "a door of said vehicle".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Wampfler (US 3341223). In re claim 1, Wampfler discloses retractable safety steps for a vehicle comprising: a fixing means (FIGS 3-7; items 5, 7, 8); a stepping means being connected movably in forward and out backward to the fixing means (FIGS 1, 3-5, 7; item 12); and an operating means (FIGS 3-6; items 21-24). Furthermore, Wampfler describes the operating means of his invention as operating the stepping means according to the opening and shutting of the vehicle door (FIGS 1-6; item 1).

In re claim 2, Wampfler also shows a front frame (FIGS 3-5; items 4, 7, 8) and a rear frame (FIGS 3-7; items 4, 5, 7) arranged with a predetermined distance. In addition, said front frame and rear frame are shown to have upper rollers (FIGS 3, 4, 7; item 9) and lower rollers (FIGS 3, 4, 7; item 10), installed thereon.

In re claim 4, Wampfler further teaches said stepping means to consist of a guide bar (FIGS 3-5, 7; item 18) interposed between said upper rollers and lower rollers and a foothold (FIGS 2-7; item 13), said foothold connected to the front of said guide bar.

Claims 1, 6, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Jeon et al (US 6612596). In re claim 1, Jeon shows a fixing means (FIG 1; items 4, 10); a stepping means (FIG 1; item 20); and an operating means (FIG 1; item 30).

Furthermore, in re claim 6, Jeon discloses a rotating link (FIG 2; items 38, 42) rotatably connected to said fixing means, a door connecting rod (FIG 2; item 38c) fixedly connected to one end of said rotating link, and a operating member (FIG 2; items 25, 41) being rotatably connected to the other end of said rotating link and connecting to said stepping means.

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In re claim 8, Jeon additionally shows a door-connecting bracket (FIG 2, item 31) being fixedly connected to said door and being rotatably connected to said door connecting rod.

Claims 9, 10 are rejected under 35 U.S.C. 102(2) as being anticipated by Jeon et al (US 6612596). In re claim 9, Jeon discloses a fixing frame (FIG 2; items 4) being connected to the lower portion of the vehicle; a connecting frame (FIG 2; item 10) for fixedly connecting said fixing frame; a guide bar (FIG 2; item 22) being connected movably in forward and out backward to said fixing frame; a foothold (FIG 2; item 21) being connected to the front of said guide bar; a rotating link (FIG 2; items 38, 42) rotatably connected to the intermediate (FIG 2; item 15a), Cambridge Dictionary of American English defines intermediate as being or happening between two other related things, levels, or points, of said connecting frame; an operating member (FIG 2; items 25, 41) having one end being rotatably connected to one end of said rotating link and the other end being connected to one of said guide bar and said foothold; a door connecting rod (FIG 2; item 38c) being fixedly connected to the other end of said rotating link; and a door connecting bracket (FIG 2; item 31) being rotatably connected to said door connecting rod and being fixedly connected to said door (FIG 1; item 3).

In re claim 10, Jeon also shows said fixing frame comprising a front frame (FIG 2; item 33) and a rear frame (FIG 2; items 4), wherein said front frame and rear frame are fixedly connected to each other by a supporting member (FIG 2; items 10-14, 15).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeon in view of Duffy (US 2670968). Jeon discloses all of the features of the claimed invention as described above, and further includes an operating rod (FIG 2; items 25, 41) being fixedly connected to said stepping means, an operating rod bracket (FIG 2; item 14) being rotatably connected to said rotating link and being movably connected to said operating rod. However, Jeon lacks an elastic member covering said operating rod and being blocked at one end to be moved by said operating rod bracket. Duffy teaches in Column 4, lines 22-40 that it is known to use an elastic member (FIG 1; item 38), such as a coil spring, to cover an operating rod (FIG 1; item 24) for a movable step. Duffy also teaches to block the elastic member at one end to be moved by an operating rod bracket (FIG 1; item 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the operating means taught by Jeon, with an elastic member as taught by Duffy, since such a modification would provide the operating means of the movable step with resilient means to urge or aid the step assembly into its closed or retracted position.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kent (US 3671058) in view of Wampfler (US 3341223). Kent discloses the claimed invention: a movable side step for a vehicle (Column 1, lines 9-12) comprising: a fixing frame (FIG 1; items 18, 23)

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being connected to a body frame (FIG 1; item 19) of the lower portion of the vehicle; a connecting frame (FIG 1; item 20) for fixedly connecting said fixing frame; a guide bar (FIG 2; item 12) being connected movably to said fixing frame; a foothold (FIG 2; item 14) being connected to the front of said guide bar; a rotating link (FIG 2; item 29) rotatably connected to the intermediate of said connecting frame with a predetermined distance; an operating member (FIG 2; items 32-34) having one end being rotatably connected to one end of said rotating link and the other end being connected to one of said guide bar and said foothold; a door connecting rod (FIG 2; item 31) being fixedly connected to the other end of said rotating link. Furthermore, Kent discloses a front frame (FIG 1; items 23, 18) and a rear frame (FIG 1; items 19, 18), wherein said front frame and rear frame are fixedly connected to each other by a supporting member (FIG 1; items 23, 18).

The invention of Kent does not explicitly disclose a door connecting bracket that is rotatably connected to said door connecting rod and fixedly connected to said door, however he does inherently disclose said door connecting bracket in column 2, lines 5-6. Kent discloses the end of the rigid member 31, or door connecting rod, being connected freely pivotable to the door. The connection that Kent discloses is inherently capable of being adapted for use as said door connecting bracket.

Kent discloses a plurality of upper and lower rollers (FIG 4; items 16), however, the rollers are installed upon the guide bar, not the front and rear frames. Wampfler teaches the installation of an upper roller and a lower roller on the front and rear frames (Column 2, lines 59-65). Wampfler also teaches that the rollers serve as guides for the retractable step unit (Column 2, lines 68-69). Therefore, it would have been obvious to one having ordinary skill in the art at

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the time the invention was made to modify the method of mounting upper and lower roller elements taught by Kent, with the method of mounting as taught by Duffy, since such a modification would result in fewer parts needed for, and easier installation of said rollers onto the retractable vehicle step assembly.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeon in view of Duffy (US 2670968). Jeon discloses all of the features of the claimed invention as described above, and further includes an operating rod (FIG 2; items 25, 41) being fixedly connected to said guide bar, an operating rod bracket (FIG 2; item 14) being rotatably connected to said rotating link and being movably connected to said operating rod. However, Jeon lacks an elastic member covering said operating rod and being blocked at one end to be moved by said operating rod bracket. Duffy teaches in Column 4, lines 22-40 that it is known to use an elastic member (FIG 1; item 38), such as a coil spring, to cover an operating rod (FIG 1; item 24) for a movable step. Duffy also teaches to block the elastic member at one end to be moved by an operating rod bracket (FIG 1; item 10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the operating means taught by Jeon, with an elastic member as taught by Duffy, since such a modification would provide the operating means of the movable step with resilient means to urge or aid the step assembly into its closed or retracted position.

Allowable Subject Matter

Claim 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason for the indication of allowable subject matter in this case is the inclusion of an elastic member mounted on the upper portion of the upper roller of the front frame and on the lower portion of the lower roller of the rear frame, in combination with the other elements recited not found in the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 3,641,619 issued to Roylance teaches of a stepladder with an elastic member mounted above a roller.

U.S. Patent No. 3,771,815 issued to Bridges teaches of a rotating link connected fixedly to the foothold of a retractable step for a vehicle and connected rotatably to the intermediate of a connecting frame.

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U.S. Patent No. 6,481,733 issued to Shellabarger teaches of a stationary step for a vehicle comprising two front frames and two rear frames.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis Coolman whose telephone number is (571) 272-6014.

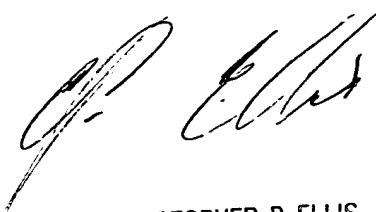
The examiner can normally be reached on Monday thru Thursday, 8am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Travis Coolman
Examiner
Art Unit 3618

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